

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

March 11, 2010

Board of Land
and Natural Resources
Honolulu, Hawaii

Request for Approval to Add Federal Funding (\$365,250) and Extend through FY11
DLNR/University of Hawaii (UH) Contract No. 55137 for the Project Titled
Evaluating the Effectiveness of Restricted Fishing Areas for Improving the Bottomfish Fishery

Submitted herewith for your consideration is a request to amend and extend Contract No. 55137 between DLNR and the UH. Supplemental Contract No. 4 will provide additional Federal funding and allow continuation of the on-going fisheries project titled "Evaluating the Effectiveness of Restricted Fishing Areas for Improving the Bottomfish Fishery." The bottomfish project is under the direction of Dr. Jeff Drazen of the UH's Department of Oceanography. Supplemental Contract No. 4 extends the project from July 1, 2010 through June 30, 2011 and provides \$365,250 in Federal funds from a U.S. Fish and Wildlife Service Sport Fish Restoration grant. No State General Funds are being used. The UH will provide the required State match component (\$121,750) for the grant.

The goal of the bottomfish project, which started in 2006, is to evaluate the effectiveness of the Division of Aquatic Resources (DAR) bottomfish management plan by determining how restricted fishing areas (RFAs) effect bottomfish populations inside and outside their boundaries. A non-lethal video assessment tool, the BOTCAM stereo-video baited camera system, is used to collect baseline data for determining 1) if bottomfish populations on habitats inside the bottomfish restricted fishing areas (BRFAs) improve (i.e. increase in numbers and average size of fish) after the closures take effect, and if so 2) if bottomfish populations on adjacent habitats outside the BRFAs also improve (as a result of spillover), or 3) if bottomfish populations on adjacent habitats outside the BRFAs diminish (decrease in numbers and average size of fish) as a result of displaced fishing effort. Data collected from these surveys and previous surveys is then processed and analyzed for use in helping the DLNR evaluate the effectiveness of the State's closed area management plan for this fishery.

In FY11 the following will be performed:

1. Continue assessments and monitoring of bottomfish populations inside and outside the State's BRFAs, using the BOTCAM baited drop camera systems and, when needed, conduct limited experimental fishing surveys.
2. Continue to analyze the video completing analysis of the FY09 collected data. This includes species identification, counts, and length data to assess relative abundance and size frequencies of harvested bottomfish species.
3. Continue analysis of data for refinement of bottomfish essential fish habitat definitions in collaboration with the Division of Aquatic Resources (DAR), UH's Hawaii Undersea Research

Laboratory and the National Oceanic and Atmospheric Administration's Pacific Islands Regional Office (NOAA-PIRO), and use the data for preliminary analysis of BRFA effects on bottomfish populations.

4. Continue monitoring bottomfish movements into and out of BRFAs in collaboration with other UH scientists and NOAA-PIRO using acoustic tagging methods.
5. Complete a statistical analysis of bottomfish relative abundance and size frequencies inside and outside of 6 BRFAs from data collected from the first year of the project (baseline information). Also, data will be compared between BRFAs that have had historical protection from the original system begun in 1997 (i.e. Niihau) to those for which protection was initiated with the new BRFA system in 2007. This will provide some preliminary insight as to the efficacy of the BRFA system in terms of its management objectives.
6. Present the DLNR/DAR with a complete and detailed summary of the findings for use in their planned RFA monitoring program.

Supplemental Contract No. 4 to Contract No. 55137 is currently being reviewed for approval by the UH.

RECOMMENDATION:

"That the Board authorize the Chairperson to negotiate and, subject to necessary approvals, amend/extend Contract No. 55137 with the University of Hawaii."

Respectfully submitted,



DAN POLHEMUS
Administrator

APPROVED FOR SUBMITTAL:



LAURA H. THIELEN
Chairperson